CLAIMS

We claim:

1 1. A computer implemented method for facilitating trick mode playback for a user,
2 comprising:
3   accessing a plurality of encoded digital video frames on a first computer system;
4   identifying a subset of said encoded digital video frames for compressed video
5   encoding;
6   for all said identified encoded digital video frames, encoding an associated playback
7   video frame;
8   downloading said encoded playback video frames on a second computer system;
9   streaming said encoded digital video frames to said second computer system;
10   decoding said digital video frames and said playback video frames;
11   if said user directs, incrementally playing said digital video frames or said playback
12   video frames;
13   enabling said user to switch between playing said digital video frames and said
14   playback video frames;
15   enabling said user to change location of playing said playback video frames; and
16   when switching from playing said playback video frames to playing said digital video
17   frames, matching playing of said digital video frames with said location of
18   playing said playback video frames.

1 2. The method of Claim 1 further comprising said second computer system including a
2 data server computer system and a client computer system.

1 3. The method of Claim 1 further comprising said first computer system including an
2 initiating computer system and a data server computer system.

1   4. The method of Claim 1 further comprising, when said user directs incrementally

2   playing said playback video frames, enabling said user to direct playing of said playback

3   video frames in either a forward direction or a reverse direction.

1   5. The method of Claim 1 further comprising:

2   playing said digital video frames via a digital window on said second computer

3   system; and

4   playing said playback video frames via a preview window on said second computer

5   system.

1   6. The method of Claim 1 further comprising:

2   playing said digital video frames via a digital window on said second computer

3   system; and

4   playing said playback video frames via overlaying a preview window on said digital

5   window.

1   7. A computer implemented method for facilitating fast audio playback for a user,

2   comprising:

3   accessing a plurality of encoded digital audio frames on a first computer system;

4   identifying a subset of said encoded digital audio frames for compressed audio

5   encoding;

6   for all said identified encoded digital audio frames, encoding an associated playback

7   audio frame;

8   downloading said encoded playback audio frames on a second computer system;

9   streaming said encoded digital audio frames to said second computer system;

10   decoding said digital audio frames and said playback audio frames;

11   if said user directs, incrementally playing said digital audio frames or said playback

12   audio frames;

13   enabling said user to switch between playing said digital audio frames and said

14   playback audio frames;

15   enabling said user to change location of playing said playback audio frames; and

16   when switching from playing said playback audio frames to playing said digital audio

17   frames, matching playing of said digital audio frames with said location of

18   playing of said playback audio frames.

1   8. The method of Claim 7 further comprising said second computer system including a

2   data server computer system and a client computer system.

1   9. The method of Claim 7 further comprising said first computer system including an

2   initiating computer system and a data server computer system.

            10. The method of Claim 7 further comprising:

                playing said digital audio frames via a digital window on said second computer

                    system; and

                playing said playback audio frames via a preview window on said second computer

                    system.

            11. The method of Claim 10 further comprising:

                associating audio attributes with said playback audio frames; and

3   representing said associated audio attributes on said preview window.

1   12. A computer implemented method for facilitating trick mode playback for a user,

2   comprising:

3   accessing a plurality of encoded digital video frames and a plurality of encoded digital

4   audio frames on a first computer system;

5   identifying a subset of said encoded digital video frames for compressed video

6   encoding;

7   identifying a subset of said encoded digital audio frames for compressed audio

8   encoding;

9   for all said identified encoded digital video frames, encoding an associated playback

10   video frame;

11   for all said identified encoded digital audio frames, encoding an associated playback

12   audio frame;

13   downloading said encoded playback video frames and said encoded playback audio

14   frames on a second computer system;

15   multiplexing said encoded digital video frames and said encoded digital audio frames

16   on said first computer system;

17   streaming said multiplexed digital frames to said second computer system;

18   de-multiplexing said multiplexed digital frames;

19   decoding said encoded digital video frames, said encoded digital audio frames, said

20   encoded playback video frames, and said encoded playback audio frames; and

21   if said user directs:

22   synchronizing said digital video frames and said digital audio frames and

23   playing said synchronized digital video frames and digital audio

24   frames; or

25   synchronizing said playback video frames and said playback audio frames and

26   playing said synchronized playback video frames and playback audio

27   frames;

28   enabling said user to switch between playing said synchronized digital video frames

29   and digital audio frames and said synchronized playback video frames and

30   playback audio frames;

31   enabling said user to change location of playing said synchronized playback video

32   frames and playback audio frames; and

33   when switching to playing said synchronized digital video frames and digital audio

34   frames, matching playing of said synchronized digital video frames and digital

35   audio frames with said location of playing of said synchronized playback

36   video frames and playback audio frames.

1   13. The method of Claim 12 further comprising said second computer system including a

2   data server computer system and a client computer system.

1   14. The method of Claim 12 further comprising said first computer system including an

2   initiating computer system and a data server computer system.

1   15. The method of Claim 12 further comprising:

2   playing said synchronized digital video frames and digital audio frames via a digital

3   window on said second computer system; and

4   playing said synchronized playback video frames and playback audio frames via a

            preview window on said second computer system.

    16. The method of Claim 12 further comprising:

        playing said synchronized digital video frames and digital audio frames via a digital

            window on said second computer system; and

        playing said synchronized playback video frames and playback audio frames via

            overlaying a preview window on said digital window.

    17. A computer implemented method for facilitating trick mode playback on a computer

2   system for a user, comprising:

3   accessing a plurality of encoded digital video frames;

4   identifying a subset of said encoded digital video frames for compressed video

5   encoding;

6   for all said identified encoded digital video frames, encoding an associated playback

7   video frame;

8   downloading said encoded playback video frames on said computer system;

9   decoding said digital video frames and said playback video frames on said computer

10   system;

11   if said user directs, incrementally playing said digital video frames or said playback

12   video frames;

13   enabling said user to switch between playing said digital video frames and said

14   playback video frames;

15   enabling said user to change location of playing said playback video frames; and

16   when switching from playing said playback video frames to playing said digital video

17   frames, matching playing of said digital video frames with said location of

18   playing said playback video frames.

1   18.   A computer implemented method for facilitating fast audio playback on a computer

2   system for a user, comprising:

3   accessing a plurality of encoded digital audio frames;

4   identifying a subset of said encoded digital audio frames for compressed audio

                    encoding;

5   for all said identified encoded digital audio frames, encoding an associated playback

                    audio frame;

6   downloading said encoded playback audio frames on said computer system;

7   decoding said digital audio frames and said playback audio frames on said computer

                    system;

8   if said user directs, incrementally playing said digital audio frames or said playback

9   audio frames;

10   enabling said user to switch between playing said digital audio frames and said

11   playback audio frames;

12   enabling said user to change location of playing said playback audio frames; and

13   when switching from playing said playback audio frames to playing said digital audio

14   frames, matching playing of said digital audio frames with said location of

15   playing of said playback audio frames.

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1   19.   An article of manufacture comprising a program storage medium readable by a

2   computer and embodying one or more instructions executable by said computer for

3   causing a computer system to facilitate trick mode playback for a user, comprising:

4   accessing a plurality of encoded digital video frames on a first computer system;

5   identifying a subset of said encoded digital video frames for compressed video

6   encoding;

7   for all said identified encoded digital video frames, encoding an associated playback

8   video frame;

9   downloading said encoded playback video frames on a second computer system;

10   streaming said encoded digital video frames to said second computer system;

11   decoding said digital video frames and said playback video frames;

12   if said user directs, incrementally playing said digital video frames or said playback

13   video frames;

14   enabling said user to switch between playing said digital video frames and said

15   playback video frames;

16   enabling said user to change location of playing said playback video frames; and

17   when switching from playing said playback video frames to playing said digital video

18   frames, matching playing of said digital video frames with said location of

19   playing said playback video frames.

1   20. The article of manufacture of Claim 19 further comprising said second computer

2   system including a data server computer system and a client computer system.

1   21. The article of manufacture of Claim 19 further comprising said first computer system

2   including an initiating computer system and a data server computer system.

1   22. An article of manufacture comprising a program storage medium readable by a

2   computer and embodying one or more instructions executable by said computer for

3   causing a computer system to facilitate fast audio playback for a user, comprising:

4   accessing a plurality of encoded digital audio frames on a first computer system;

5   identifying a subset of said encoded digital audio frames for compressed audio

6   encoding;

7   for all said identified encoded digital audio frames, encoding an associated playback

8   audio frame;

9   downloading said encoded playback audio frames on a second computer system;

10   streaming said encoded digital audio frames to said second computer system;

11   decoding said digital audio frames and said playback audio frames;

12   if said user directs, incrementally playing said digital audio frames or said playback

13   audio frames;

14   enabling said user to switch between playing said digital audio frames and said

15   playback audio frames;

16   enabling said user to change location of playing said playback audio frames; and

17   when switching from playing said playback audio frames to playing said digital audio

18   frames, matching playing of said digital audio frames with said location of

19   playing of said playback audio frames.

23. The method of Claim 22 further comprising said second computer system including a
data server computer system and a client computer system.

24. The method of Claim 22 further comprising said first computer system including an

2   initiating computer system and a data server computer system.

1   25. A computer system for facilitating trick mode playback for a user, comprising:

2   a plurality of encoded digital video frames on a first said computer system;

3   a subset of said encoded digital video frames that are identified for compressed video

4   encoding;

5   for all said identified encoded digital video frames, an associated encoded playback

6   video frame;

7   said encoded playback video frames that are downloaded on a second said computer

8   system;

9   said encoded digital video frames that are streamed to said second computer system;

10   said digital video frames that are decoded from said encoded digital video frames;

11   said playback video frames that are decoded from said encoded playback video

12   frames;

13   while said user directs:

14   said digital video frames being incrementally played on said second computer

15   system; or

16   said playback video frames being incrementally played on said second

17   computer system;

18   a location of playing said playback video frames being changed by said user; and

19   said location of playing facilitating synchronized playing of said digital video frames

20   when said user directs playing said digital video frames after playing said

21   playback video frames.

26. The computer system of Claim 25 further comprising said second computer system

including a data server computer system and a client computer system.

27. The computer system of Claim 25 further comprising said first computer system

2   including an initiating computer system and a data server computer system.

1   28. A computer system for facilitating fast audio playback for a user, comprising:

2   a plurality of encoded digital audio frames on a first said computer system;

3   a subset of said encoded digital audio frames that are identified for compressed audio

4   encoding;

5   for all said identified encoded digital audio frames, an associated encoded playback

6   audio frame;

7   said encoded playback audio frames that are downloaded on a second said computer

8   system;

9   said encoded digital audio frames that are streamed to said second computer system;

10   said digital audio frames that are decoded from said encoded digital audio frames;

11   said playback audio frames that are decoded from said encoded playback audio

12   frames;

13   while said user directs:

14   said digital audio frames being incrementally played on said second computer

15   system; or

16   said playback audio frames being incrementally played on said second

17   computer system;

18   a location of playing said playback audio frames being changed by said user; and

19   said location of playing facilitating synchronized playing of said digital audio frames

20   when said user directs playing said digital audio frames after playing said

21   playback audio frames.

29. The computer system of Claim 28 further comprising said second computer system
including a data server computer system and a client computer system.

30. The computer system of Claim 28 further comprising said first computer system
including an initiating computer system and a data server computer system.